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EXHIBIT D

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)
)
Petition of ACS of Anchorage, Inc. Pursuant to)
Section 10 of the Communications Act of 1934, as) WC Docket No. _____
amended, for Forbearance from Sections 251(c)(3))
and 252(d)(1) in the Anchorage LEC Study Area)
)

**STATEMENT OF HOWARD A. SHELANSKI IN SUPPORT OF
PETITION OF ACS OF ANCHORAGE, INC.
FOR FORBEARANCE FROM SECTIONS 251(C)(3) AND 252(D)(1)**

Qualifications

1. I am Professor of Law and Co-Director of the Berkeley Center for Law and Technology at the University of California at Berkeley. I received my B.A. from Haverford College in 1986, my J.D. from the University of California at Berkeley in 1992, and my Ph.D. in economics from the University of California at Berkeley in 1993. I have been a member of the Berkeley faculty since 1997. In 1998-2000 I was on leave from my faculty position to serve as a Senior Economist to the President's Council of Economic Advisers (1998-99) and then as Chief Economist of the Federal Communications Commission (1999-2000). I rejoined the Berkeley faculty on a full time basis in July 2000. I formerly practiced law in Washington, D.C. and served as a law clerk to Justice Antonin Scalia of the U.S. Supreme Court.

2. I teach and conduct research in the areas of telecommunications regulation, antitrust, and applied microeconomics. My recent publications include articles in the *Yale Journal on Regulation*, the *University of Chicago Law Review*, the *University of Chicago Legal Forum*, and *Telecommunications Policy*. I am co-author of the legal textbook

Telecommunications Law and Policy (Carolina Academic Press, 2001). My C.V. is provided as Attachment A.

Summary

3. The primary purpose of this declaration is to explain why the FCC should forbear from requiring ACS of Anchorage, Inc. ("ACS") to continue the provisioning of unbundled network elements ("UNEs") in the Anchorage, Alaska Study Area. Forbearance is warranted because Section 251(c)(3) has been "fully implemented" in Anchorage, and CLECs will not be "impaired" in the absence of UNEs. In fact, given entrant General Communication Inc.'s ("GCI's") leading position in the Anchorage telecommunications market, competition will more likely be enhanced by a grant of forbearance as requested by ACS.

4. From an economic perspective, two facts relevant to unbundled access in Anchorage stand out: First, competitive entry by GCI has been so successful that ACS no longer has a majority share of the market. Second, GCI is capable of serving all or virtually all of the Anchorage Study Area over its own facilities. These facts demonstrate that competitive entry in Anchorage has not been "impaired," as defined in the context of Section 252(d)(2)(B) of the Communications Act of 1934, as amended (the "Act"), and would not be impaired in the absence of unbundled access to ACS's network.

5. Competitive entry into Alaska's local exchange markets has been enormously successful not just by the standards of local telecommunications, but by the standards of competitive entry in any industry. As just one example, consider the entry of direct broadcast satellite ("DBS") video providers that entered into competition with incumbent cable providers in the mid-1990's. The DBS providers are considered very successful because they have (at last

count) taken 28 percent of the subscription-video market away from cable.¹ Since GCI entered the local services market in Anchorage in 1997, it has taken more than 50% of that market, serving both mass market and enterprise customers. GCI has done so using its own switches and transport and, increasingly, its own loop facilities. Statement of Thomas R. Meade on Behalf of ACS at ¶ 15 (“Meade Statement”). Indeed, as GCI has been increasing its market share, it has been decreasing its use of UNE loops. *Id.* The fact that a competitor using exclusively or primarily its own facilities has been so successful makes the case against impairment, and hence against unbundled access, an overwhelming one in the Anchorage Study Area.

6. The evidence from Anchorage favors forbearance from unbundling even in areas within the study area where GCI is not currently providing local exchange service entirely over its own facilities. Economic “impairment” is only one reason competitors might not enter a market; higher costs, lower expected profits, and generally less-attractive business opportunities are other reasons. Given the evidence of successful entry by GCI in Anchorage and in other rural markets in Alaska, there is little basis for assuming that impairment is the reason entry has not yet reached an equivalent level in certain areas. The evidence is persuasive that GCI can successfully enter into competition where it wishes to do so and that GCI does not face barriers to entry. Moreover, consumers throughout the Anchorage Study Area are well protected by GCI’s competitive strength because ACS’s retail rates must be consistent throughout the study area.

7. GCI owns a monopoly cable network that gives it a ready alternative to either UNE-L or UNE-P (or resale) for providing switched local telephone service. GCI is already capable of providing local service using its cable telephony and of switching from UNE loops to

¹ *Annual Assessment of the Status of Competition in the Market for Delivery of Video Programming*, Eleventh Annual Report, 20 FCC Rcd 2755, ¶ 4 (2005).

its cable telephony platform. Indeed, GCI has already migrated a substantial portion of its customers onto its proprietary cable network and has announced plans to complete this migration within 18 months. *See* Meade Statement at ¶ 15. In addition, GCI owns substantial fiber assets for serving major business customers. This puts GCI in a position where it does not have to rely at all on ACS's facilities. Not only do GCI's resources make it a powerful and potentially dominant retail competitor, but they also put GCI in a position to be an independent provider of wholesale facilities to other CLECs.

Background Facts

8. Anchorage, Alaska is among the most competitive local telecommunications market in the country. Though the population is only roughly 280,000 and residential telecommunications customers account for approximately 60% of the lines, all Anchorage customers enjoy fully facilities-based competitive entry. In the Anchorage market, ACS has lost approximately 50 percent of the local exchange market, primarily to facilities-based competition. ACS faces substantial competition from several providers in the Anchorage local exchange services market, including GCI, AT&T Alascom, Dobson Cellular and other carriers. Competition affects both the business sector and the residential sector.

9. ACS's primary competitor in the local exchange market is the incumbent cable television company, GCI. Since it has entered the market, GCI has gained nearly 50 percent of the Anchorage local exchange market, including both residential and business customers, and controls roughly half of the long-distance market in the state, in addition to being the dominant video and broadband provider in Alaska. In addition, GCI's cable television plant passes nearly all of the households in Anchorage, and it is providing local exchange service to a substantial number of its customers via cable telephony. GCI has fiber facilities that appear to pass nearly

all the businesses in Anchorage, including some buildings where GCI has exclusive access. Statement of Michael Bowman on Behalf of ACS at ¶¶ 6-8. GCI already provides over 90 percent of its customers in Anchorage over its own switch and fiber ring and plans to migrate off of ACS's UNE loops within 18 months. GCI's equipment is currently physically collocated in all five of ACS's wire centers, which provides GCI with unrestricted access to virtually every customer in the Anchorage market. Evidence demonstrates that GCI has the ability to access the remainder of the lines with minimal investment. The number of customers GCI serves via ACS UNE loop is declining because GCI is transitioning to a fully facilities-based network of its own. GCI already serves more than 12,800 lines on its cable telephony platform and, as mentioned, has announced plans to transition the remainder of its local exchange customers to its own network in the very near future.

10. GCI is a company with substantial resources and experience to continue and augment its success to date. Indeed, GCI is a considerably larger company than ACS's parent, Alaska Communications Systems Group, Inc. ("ACS Group"), which also owns three other LECs and other subsidiaries. GCI reported 2004 revenues of \$424.8 million (GCI Form 10-K Annual Report as of Dec. 31, 2004), while ACS Group had 2004 revenues of \$320 million. GCI reported its 2004 results with net income of \$21.3 million, or \$0.34 per diluted share, and 2004 total assets of \$840,847,000 (GCI Form 10-K Annual Report as of Dec. 31, 2004). ACS Group reported total assets of \$637,127,000 for 2004 (ACS Group, Form 10-K Annual Report as of Dec. 31, 2004). GCI has successfully deployed its resources in the Anchorage local exchange market. Based on the CASBB report for June 2005 and information regarding GCI's resale ordering, GCI serves 89,000 lines out of approximately 182,000 lines in Anchorage, or roughly 49%. (ACS provides local exchange service to approximately 48% of the Anchorage study

area.) By the end of the second quarter of 2005, GCI had more than 12,800 Digital Local Phone Service (cable telephony) lines in services. As evidence of the speed with which GCI can become entirely facilities-based, it plans in a mere 2 quarters to double that number and to provide a total of approximately 25,000 cable telephony lines by the end of 2005. (GCI Reports 2004 Financial Results).

ACS Lacks Market Power

11. The competition described above deprives ACS of market power over retail services in the Anchorage Study Area. As a threshold matter, ACS remains under the jurisdiction of the Regulatory Commission of Alaska ("RCA"), which can regulate ACS's retail rates. More importantly, however, competitive pressure from GCI prevents ACS from profitably raising prices—the heart of market power. Indeed, ACS has continued to lose customers through retail competition at an annual, average line-loss rate of approximately 8 percent per year over the last five years, a very significant pace. More than any other market of which I am aware, the Anchorage local study area has become a competitive zone in which the incumbent provider has irreversibly lost bottleneck control and is effectively disciplined by market forces.

12. GCI has taken a significant share of customers from ACS; ACS's market share has now dropped below 50%. Consumers in Anchorage clearly have a choice between local service providers, and their demand for the services of either individual firm is elastic; in other words, consumers will substitute one carrier for the other in the event they are dissatisfied with price or quality of service. *See* Statement of David C. Blessing in Support of Petition of ACS of Anchorage, Inc. for Forbearance from Sections 251(c)(3) and 252(d)(1) at 6-8. GCI's ability to meet the demand of consumers seeking to substitute GCI's service for ACS's service demonstrates similar elasticity of competitive supply in the Anchorage local exchange market. It

is particularly noteworthy that GCI has been expanding its retail output while *reducing* its wholesale consumption of UNE loops. Meade Statement at ¶ 15. Such elasticity of competitive supply and of consumer demand could not exist in a market in which the incumbent has market power.

13. Further, in the Anchorage market, an increase in UNE loop price would not hinder, but rather would encourage, development of facilities-based competition. GCI has stated publicly and has demonstrated that it would accelerate deployment of its own facilities upon an increase in the price of UNE loops. As the FCC has itself consistently recognized, facilities-based competition brings benefits of efficiency and innovation that resale or UNE-based competition simply cannot replicate. *Unbundled Access to Network Elements, Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers*, Order on Remand, 20 FCC Rcd 2533, ¶ 2 (2005) (“TRO Remand Order”). In terms of the prices they pay and the quality and range of services they receive, consumers benefit more from facilities-based competition in both the short run and long run.

The Anchorage Study Area is the Correct Geographic Market

14. I believe the Anchorage Study Area should be reviewed as a single economic market, not five separate geographic markets defined by wire center boundaries. ACS cannot set different prices for different residential customers within the Anchorage Study Area, so the competition ACS faces protects all Anchorage customers. As noted above, GCI is collocated in all five of ACS’s Anchorage wire centers. In addition, it is important to keep in mind that GCI owns a monopoly cable network that reaches nearly all households in the Anchorage Study Area. Further, GCI’s extensive fiber facilities could be used to serve nearly all of the business customers in Anchorage. Exactly how many business and residential customers GCI serves and

where they are located is unclear because GCI is not required to disclose the location of its customers or facilities. In such a setting, it makes more sense to examine the entire study area rather than individual wire centers. GCI does not face barriers to facilities-based entry and has demonstrated that it has the ability to deploy and serve customers over its own facilities. GCI's ability to upgrade or expand its network to serve customers it does not yet reach over its own facilities does not seem logically related to the historical development of ILEC wire center locations. Anywhere GCI does not choose to deploy facilities, it can resell ACS services, which it currently does in some areas. Regulatory intervention to provide additional substitutes for GCI's use of its own facilities is unlikely to benefit consumers even in the short run and certainly will not provide the benefits in the long run that true facilities-based competitive offers. Should the FCC choose to examine different classes of customers as separate "service markets," it should recognize that, in Anchorage, there are virtually no customers large enough to purchase capacity above the DS-1 level. Thus, there are at most two classes of service, DS-1 (or business) and DS-0 (or residential) service.

15. The FCC has itself cautioned against artificially narrow market definitions. In the context of switching, the Commission stated that the market for local switching should not be defined as being so small "that a competitor serving that market alone would not be able to take advantage of available scale and scope economies from serving a wider market." *Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers; Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, Report and Order and Order on Remand, 18 FCC Rcd 16978, ¶495 (2003) ("2003 Triennial Review Order"). The FCC's admonition with respect to switching applies more generally and implies at a minimum

that local exchange markets should not be defined in such a way that artificially severs areas that could economically be served from existing facilities.

16. If the purpose of examining each wire center is to determine whether competitors have alternative facilities access in each wire center, that analysis would be meaningless in Anchorage. GCI is collocated in all five of the wire centers in the Anchorage Study Area. Further, to keep zooming in and narrowing the geographic market to a small pocket of customers for the purposes of finding impairment and mandating unbundling would lead to strange results. Such an approach would imply that, even if GCI took 90% of local exchange customers in Anchorage, it would still be able to claim it is competitively "impaired" and demand unbundled switching from the incumbent that has only the remaining 10% of the market. But such a claim of impairment would defy common sense and sound economic policy. The fact that GCI's existing facilities allow it directly to serve virtually 100% of customers in the Anchorage study area demonstrates that GCI is unimpaired not only in *competing* but is unimpaired in *dominating* the Anchorage Study Area.

17. More importantly, in the particular context of the Anchorage Study Area, narrowing the market definition to wire centers for UNE purposes would likely slow competition. In the absence of unbundling rules, ACS and GCI would have strong incentives to reach voluntary wholesale agreements that would allow each carrier to serve those customers of the other that it cannot yet reach over its own facilities. There are customers ACS does not currently reach but that GCI does. In Anchorage, there are three subdivisions on Elmendorf Air Force Base and two office buildings in which only GCI has loop facilities. Where such competitive conditions and incentives to negotiate exist, neither carrier is meaningfully "impaired."

18. Mandatory unbundling, however, undermines voluntary bargaining and leads to comparatively lower competition than would result without unbundling. Under a UNE mandate, GCI can avail itself of ACS's facilities at regulated rates without offering anything in return. The effects of such unbundling under the circumstances of competitive parity that exist in Anchorage would be, at best, to hasten nominal competition to some customers while leaving those customers that ACS cannot reach to be served only by GCI. The result of unbundling in this context is less competition than would otherwise exist—GCI gets mandatory access to ACS's customers, but ACS does not get equivalent access to customers reached only by GCI. This asymmetric outcome is counterproductive to consumer welfare and to the goals of the 1996 Act.

19. Unbundling could, moreover, substitute UNE-based competition for full facilities-based competition and lead to long-run harm even to those customers who would purportedly benefit from GCI's UNE-L service. As the courts have made clear, any assessment of unbundling must take into account both the costs and benefits of UNE access. *USTA v. FCC*, 359 F.3d 554, 563 (D.C. Cir. 2004). In this case, because of GCI's extensive network, the benefits are scant and the potential costs sufficiently high that unbundling would not rationally serve the goals of the 1996 Act. The FCC has repeatedly recognized the tradeoffs that unbundling may entail and recently affirmed its recognition that "unbundling can create disincentives for incumbent LECs and competitive LECs to deploy innovative services and facilities, and is an especially intrusive form of economic regulation – one that is among the most difficult to administer." TRO Remand Order at ¶35. Importantly, the FCC has made clear that, in light of the tradeoffs and costs of unbundling, it will "deny access to UNEs in cases where the requesting carrier seeks to provide service exclusively in a market that is sufficiently competitive without

the use of unbundling.” *Id.* at ¶34. While in the TRO Remand Order the FCC issued an across-the-board denial of UNEs only in the cases of wireless and long-distance services, the FCC specifically invited forbearance petitions targeted at geographic areas in which unbundling should be similarly unavailable for the provision of local exchange service. Anchorage is clearly a market to which the FCC’s forbearance reasoning applies.

20. Indeed, the Anchorage Study Area represents a geographic market in which GCI and ACS meaningfully compete for the overwhelming majority of customers. It comprises a market in which neither company can unilaterally raise prices in a sustained way without losing market share to the other. There is no economic basis for adopting a narrower market definition when market power is absent in the market more broadly defined.

Retail Local Exchange Service is the Relevant Product Market

21. Under the 1996 Act, UNEs are a means to local exchange competition, not an end in and of themselves. What is economically relevant under the Act is therefore the retail market for local telephone service, not the wholesale market for UNEs. Once the evidence shows that a competitive entrant suffers no impairment in entering the local exchange market, competition no longer depends on access to UNEs and the state of the wholesale input market is irrelevant. Even if the wholesale market were somehow relevant, GCI’s ubiquitous facilities should be counted as resources potentially available to any entrant into the market. The United States Court of Appeals has twice affirmed what the FCC itself has said: that it cannot ignore intermodal alternatives to ILEC facilities when evaluating impairment. *USTA v. FCC*, 359 F.3d 554, 572-573 (D. C. Cir. 2004). But the more fundamental point is that where, as in Anchorage, a powerful competitor has demonstrated its ability to use its own facilities to take enormous market share from the incumbent, the Commission need not even look to the state of the

wholesale input market to evaluate impairment; the more direct evidence from the retail market shows plainly that impairment does not exist.

The Facts in the Anchorage Study Area Show that Entry Is Not Impaired and that Section 251(c) Has Been Fully Implemented

22. The Supreme Court has made clear that unbundling under the 1996 Act is subject to “some limiting standard, rationally related to the goals of the Act.” *AT&T v. Iowa Utilities Bd.*, 525 U.S. 366, 388 (1999). The Court held that there must be “some substance to the ‘necessary’ and ‘impair’ requirements” of the 1996 Act (*id.* at 392) and that it could not be left up to entrants to decide whether unbundling is necessary to prevent competitive impairment. *Id.* at 389. The United States Court of Appeals later built on the Supreme Court’s ruling and held that the impairment standard for unbundling is a stringent one that requires proof of more than the normal costs and disadvantages of competitive entry: “To rely on cost disparities that are universal as between new entrants and incumbents in *any* industry is to invoke a concept too broad, even in support of an *initial* mandate, to be reasonably linked to the purpose of the Act’s unbundling provisions.” *USTA v. FCC*, 290 F.3d 415, 427 (D.C. Cir. 2002). Based on these rulings, the FCC in its 2003 Triennial Review Order defined “impairment” as a condition in which competitive entry is “uneconomic” in the sense that the costs of entry exceed the potential revenues from entry. 2003 Triennial Review Order at ¶84.

23. It is quite clear that for GCI, entry has been economic. The firm has aggressively and successfully pursued local exchange customers with no evidence that this strategy lacks the potential for cost recovery and a competitive rate of return; indeed, GCI’s substantial market share in local exchange services and its rapid transitioning of its customers entirely onto its own facilities demonstrates the economic viability and success of GCI’s entry. In Anchorage there is nothing hypothetical about competitive entry or GCI’s competitive success. While the

Commission generally set standards for unbundling relief based on a hypothetical, “reasonably efficient” entrant and predictions about competitive prospects with and without UNEs, the Commission need not rely on models and predictions in Anchorage. Rather, the Commission has evidence from a real firm in a real market; and that firm has been able to continue to increase its market share while reducing its reliance on UNEs. Any impairment that such an entrant could try to conjure could not be economically significant; and it certainly could not be significant enough to offset the well-recognized costs of unbundling. TRO Remand Order at ¶ 36.

24. More generally, the data from Anchorage more plainly show that by any reasonable economic definition, Section 251(c) of the Act is fully implemented in that particular market. The incumbent’s loss of more than 50% of its market share and the extensive facilities-based network deployment by GCI are proof that the procompetitive objectives of the Act have been met in the Anchorage Study Area. Whether the Commission evaluates business and residential customers as separate “service markets” or looks at the study area as a single market, ACS and GCI have comparable market share and, with forbearance, would enjoy comparable bargaining power. Furthermore, not only does GCI’s success and facilities-based strategy show that *it* is not impaired, but the ubiquity of GCI’s facilities show that ACS can no longer be the bottleneck cause of impairment to any other CLECs that might wish to enter the Anchorage market. The success of the Act’s pro-competitive aims and the loss of ACS’s power either to harm retail customers or to impair competitors are evidence of the Act’s successful implementation in Anchorage. Enforcement of Section 251(c)(3)’s unbundling rules is no longer necessary to ensure the competition that will protect consumers and ensure rates and practices that are just, reasonable, and non-discriminatory.

25. Forbearance is in the public interest and will promote competitive market conditions because as discussed earlier, mandatory unbundling is at this point more likely to have harmful consequences for competition and the deployment of new telecommunications facilities in Anchorage. Indeed, forbearance from Section 251(c)(3) will give the parties incentive to negotiate new wholesale arrangements that will benefit all parties and consumers.

26. From any economic or common-sense perspective, the Anchorage local exchange market is a success story. GCI has been so successful that *two years ago* its own senior management was already saying that the incumbent, ACS, "is arguably no longer dominant." Rebuttal Testimony of Dana Tindall at 9, RCA Proceeding U-96-89 (filed Sept. 29, 2003). Two years later, as GCI has continued to take market share while at the same time reducing its need even for UNE loops, ACS is clearly no longer dominant and GCI just as clearly remains unimpaired in providing competitive local exchange service in the Anchorage Study Area.

27. Some comparisons help to put in perspective just how successful a competitor GCI has been. Entry of MCI and Sprint into long distance services in the wake of the AT&T divestiture and entry of DBS into the multichannel video distribution market are both generally considered examples of great competitive success. Yet GCI has outperformed both. In Anchorage, for example, GCI has already achieved a market share that MCI and Sprint together took more than a decade to achieve against AT&T after the 1984 divestiture. When the FCC declared AT&T to be non-dominant in 1995, AT&T still had 60% of the long-distance market.² And GCI's local market share in Anchorage is more than double the combined share of the video

² *Motion of AT&T Corp. to be Reclassified as a Non-Dominant Carrier*, Order, 11 FCC Rcd 3271 at ¶ 68 (1995).

market that DBS operators won from cable operators in their first eight years of operation.³ By any measure, the ability of a competitor to enter a market and in a few years to take a 50% share is impressive and powerfully rebuts any inference of economically meaningful competitive “impairment.”

28. In light of the market evidence from Anchorage, forbearance from mandating unbundling by ACS seems not only economically due, but overdue. The FCC has found that “actual deployment is the best indicator of whether there is impairment, and accordingly evidence of actual deployment is given substantial weight in our impairment analysis.” 2003 Triennial Review Order at ¶461; *see also, id.* at ¶510 (“The existence of a competitor that is serving the local exchange mass market with its own switch provides evidence that the mass market can be served effectively.”). Such evidence is clear and abundant in this case.

29. The competitive situation in Anchorage paints so clear a picture of non-impairment that if the Commission does not grant forbearance from unbundling now, it is difficult to imagine when it ever would. Short of waiting until the ILEC has ceased to do business, there is simply nothing else to wait for in this market. A second, fully duplicative facilities-based network of equal or greater quality and capacity is being deployed; supply and demand elasticities are high; and the “new” entrant’s market hold appears irreversible. Even if GCI went out of business, a new competitor could buy its facilities and compete with ACS without requiring any UNEs. And any new entrant could negotiate with either ACS or GCI for network access, which each would have a greater incentive to provide if this petition is granted.

³ As of June 2002, DBS subscribers comprised 20.3% of total MVPD households. *Annual Assessment of the status of Competition in the Market for the Delivery of Video Programming*, Ninth Annual Report, 17 FCC Rcd 26901 at ¶ 58 (2002).

In short, the purpose of Section 251(c)(3) has been fulfilled in Anchorage, and it is "fully implemented."

Respectfully submitted,

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ATTACHMENT A

Curriculum Vitae

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- Current Positions** **University of California at Berkeley, School of Law**
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Chief Economist. 1999-2000.
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Senior Economist, responsible for issues of industrial organization, competition policy, regulation, and trade, 1998-99.
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Associate, telecommunications and general litigation practice, 1995-97.
- Law Clerk to Justice Antonin Scalia, U.S. Supreme Court, 1994-95.**
- Law Clerk to Judge Louis H. Pollak, U.S. District Court, Eastern District of Pennsylvania, 1993-94.**
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J.D. 1992; Order of the Coif,
Senior Articles Editor, *California Law Review*
- Haverford College, Pennsylvania**
B.A. (history) with high honors, 1986
Phi Beta Kappa; varsity track and cross country
- Other** Speak French and Spanish;
Enjoy brewing beer, outdoor sports, travel, and jazz;
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**Selected Research &
Publications**

(With Peter Klein) "Empirical Research in Transaction Cost Economics: A Review and Assessment," 11 *Journal of Law, Economics, & Organization* 335 (1995).

"The Bending Line Between Conventional Broadcast and Wireless Carriage," 97 *Columbia Law Review* 1048 (1997).

"Video Competition and the Public Interest Debate," in Mackie-Mason and Waterman (eds.), Telephony, the Internet, and the Media: Selected Papers, 25th Annual Telecommunications Policy Research Conference (1998).

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"Antitrust Law as Mass-Media Regulation: Can Merger Standards Protect the Public Interest?" forthcoming, *Cal. L. Rev.* (2006).



E

EXHIBIT E